Doc. No. 366906

What is claimed is:

1. A method of straightening hair, the method comprising;

applying a composition to hair, the composition including an alkaline earth metal hydroxide and guanidine carbonate wherein the alkaline earth metal hydroxide is selected from the group consisting of calcium hydroxide, sodium hydroxide, barium hydroxide, lithium hydroxide, and potassium hydroxide;

heating the composition and hair; and removing the composition from the hair.

- 2. The method of claim 1, wherein the alkaline earth metal hydroxide is included in an emulsion.
- 3. The method of claim 1, wherein the guanidine carbonate is included in an aqueous solution.
- 4. The method of claim 2, wherein the alkaline earth metal hydroxide has a concentration of about 1.21% by weight to about 3.45% by weight, based on the total weight of the emulsion.
- 5. The method of claim 3, wherein the guanidine carbonate has a concentration of about 5.68% to about 17.06% by weight, based on the total weight of the aqueous solution.
- 6. The method of claim 1, wherein the composition and hair are heated to a temperature between about 81 degrees Fahrenheit and about 122 degrees Fahrenheit.
- 7. The method of claim 1, wherein the composition and hair are heated for a time period of between five (5) minutes and sixty (60) minutes.
 - 8. The method of claim 6, wherein the composition and hair are heated for a time period of between five (5) minutes and sixty (60) minutes.

5 '

15

20

HAIR RELAXER

Express Mail No.: EL591992633US

Doc. No. 366906

9. The method of claim 7, wherein the composition and hair are heated to a temperature between about 81 degrees Fahrenheit and about 122 degrees Fahrenheit.

- 10. The method of claim 2, wherein the guanidine carbonate is included in an aqueous solution.
- The method of claim 10, wherein the alkaline earth metal hydroxide has a concentration of about 1.21% by weight to about 3.45% by weight, based on the total weight of the emulsion.
 - 12. The method of claim 11, wherein the guanidine carbonate has a concentration of about 5.68% to about 17.06% by weight, based on the total weight of the aqueous solution.
 - 13. The method of claim 10, wherein the composition and hair are heated to a temperature between about 81 degrees Fahrenheit and about 122 degrees Fahrenheit.
 - 14. The method of claim 10, wherein the composition and hair are heated for a time period of between five (5) minutes and sixty (60) minutes.
 - 15. The method of claim 3, wherein the alkaline earth metal hydroxide is included in an emulsion.
 - 16. The method of claim 15, wherein the alkaline earth metal hydroxide has a concentration of about 1.21% by weight to about 3.45% by weight, based on the total weight of the emulsion.
 - 17. The method of claim 16, wherein the guanidine carbonate has a concentration of about 5.68% to about 17.06% by weight, based on the total weight of the aqueous solution.
 - 18. The method of claim 15, wherein the composition and hair are heated to a temperature between about 81 degrees Fahrenheit and about 122 degrees Fahrenheit.

15

20

Express Mail No.: EL591992633US

Doc. No. 366906

- The method of claim 15, wherein the composition and hair are heated for a time 19. period of between five (5) minutes and sixty (60) minutes.
- A composition for use in straightening hair comprising: 20.

a first ingredient which includes calcium hydroxide having a concentration of about 1.21% by weight to about 3.45% by/weight, based on the total weight of the first ingredient;

a second ingredient which includes guanidine carbonate having a concentration of about 5.68% by weight to about 17.06% by weight based, on the total weight of the second ingredient; and

wherein the first ingredient and a second ingredient are combined to produce a hair straightening composition.

- The composition of claim 20, wherein the first ingredient is an emulsion. 21.
- 22. The composition of claim 20, wherein the second ingredient is an aqueous solution.
- The composition of k laim 20, wherein heat is used to accelerate the production of the 23.

15 hair straightening composition.

- 24. The composition of claim 20, wherein the first ingredient is an aqueous solution.
- 25. The composition of claim 20, wherein the second ingredient is an emulsion.
- 26. A composition for use in straightening hair comprising:

a first ingredient which includes calcium hydroxide having a concentration of about 1.21% by weight to about 3.45% by weight, based on the total weight of the first ingredient; and

10=1 :≘; 4 1

20

5..

Express Mail No.: EL591992633US

Doc. No. 366906

a second ingredient which includes guanidine carbonate having a concentration of about 5.68% by weight to about 17.06% by weight based on the total weight of the second ingredient.

- 27. The composition of claim 26, wherein the first ingredient is an emulsion.
- 28. The composition of claim 26, wherein the second ingredient is an aqueous solution.
- 29. The composition of claim 26, wherein the first ingredient is an aqueous solution.
- 30. The composition of claim 26, wherein the second ingredient is an emulsion.
- 31. A method of straightening hair, the method comprising;

combining a first ingredient and a second ingredient to produce a hair straightening composition wherein the first ingredient is calcium hydroxide having a concentration of about 1.21% by weight to about 3.45% by weight, based on the total weight of the first ingredient and wherein the second ingredient is guanidine carbonate having a concentration of about 5.68% by weight to about 17.06% by weight based on the total weight of the second ingredient;

applying the hair relaxing composition to hair;

heating the hair relaxing composition and hair; and

removing the product from the hair.

- 32. The method of claim 31, wherein the first ingredient is an emulsion.
- 33. The method of claim 31, wherein the second ingredient is an aqueous solution.
- 20 34. The method of claim 31, wherein the composition and hair are heated to a temperature between about 81 degrees Fahrenheit and about 122 degrees Fahrenheit.
 - 35. The method of claim 31, wherein the composition and hair are heated for a time period of between five (5) minutes and sixty (60) minutes.

15

5

15

20

5

Express Mail No.: EL591992633US

Doc. No. 366906

36. The method of claim 32, wherein the second ingredient is an aqueous solution.

- 37. The method of claim 32, wherein the composition and hair are heated to a temperature between about 81 degrees Fahrenheit and about 122 degrees Fahrenheit.
- 38. The method of claim 36, wherein the composition and hair are heated for a time period of between five (5) minutes and sixty (60) minutes.
- 39. A composition for use in straightening hair comprising:

 an alkaline earth metal hydroxide about 0.25% by weight to about 5% by weight based on the total weight of the composition.
- 40. The composition of claim $\beta 9$, wherein the composition is an emulsion.
- 41. The composition of claim 39, wherein the composition is an aqueous solution.
- 42. A method of straightening hair, the method comprising;

providing a composition including an alkaline earth metal hydroxide wherein the alkaline earth metal hydroxide is selected from the group consisting of calcium hydroxide, sodium hydroxide, barium hydroxide, lithium hydroxide, and potassium hydroxide,

applying the composition to hair;

heating the composition and hair; and

removing the composition from the hair.

- 43. The method of claim 42, wherein the alkaline earth metal hydroxide is included in an emulsion.
- 44. The method of claim 42, wherein the alkaline earth metal hydroxide is included in an aqueous solution.
 - 45. The method of claim 42, wherein the composition and hair are heated to a temperature between about \$1 degrees Fahrenheit and about 122 degrees Fahrenheit.

5

Express Mail No.: EL591992633US

Doc. No. 366906

- 46. The method of claim 42, wherein the composition and hair are heated for a time period of between five (5) minutes and sixty (60) minutes.
- 47. The method of claim 43 wherein the composition and hair are heated to a temperature between about 81 degrees Fahrenheit and about 122 degrees Fahrenheit.
- 48. The method of claim 43, wherein the composition and hair are heated for a time period of between five (5) minutes and sixty (60) minutes.
- 49. The method of claim 44, wherein the composition and hair are heated to a temperature between about 81 degrees Fahrenheit and about 122 degrees Fahrenheit.
- 50. The method of claim 44, wherein the composition and hair are heated for a time period of between five (5) minutes and sixty (60) minutes.